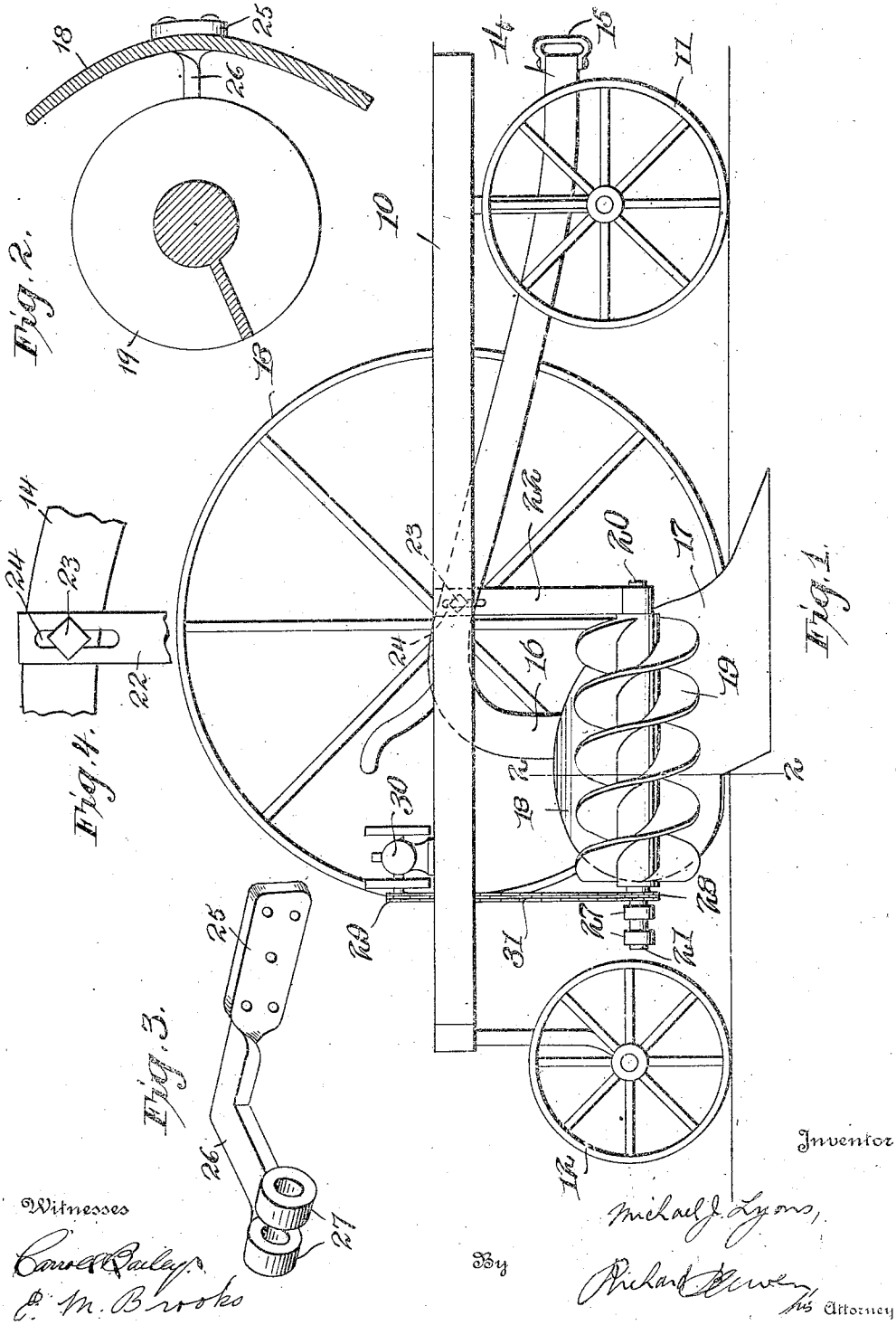
M. J. LYONS.

PLOW ATTACHMENT.

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1,173,822.

Patented Feb. 29, 1916.



Witnesses

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MICHAEL J. LYONS, OF WOOD RIVER, NEBRASKA.

PLOW ATTACHMENT.

1,173,822. Specification of Letters Patent. Patented Feb. 29, 1916.

Application filed October 18, 1913. Serial No. 796,002.

To all whom it may concern:

Be it known that I, MICHAEL J. LYONS, a citizen of the United States, residing at Wood River, in the county of Hall and State of Nebraska, have invented certain new and useful Improvements in Plow Attachments, of which the following is a specification.

This invention relates to a plow and the principal object of the invention is to provide a plow with an improved device mounted adjacent the mold-board so that the earth which is dug up by the plow will be moved along the mold-board and thus a great deal of the strain removed from the draft animals.

Another object of the invention is to so mount the device that it may be adjusted vertically with the mold-board.

Another object of the invention is to provide an improved means for operating the device.

This invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of the improved plow, Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1, Fig. 3 is a perspective view of the journal bracket which rotatably supports one end of the earth moving device, and Fig. 4 is a fragmentary view showing the manner of adjustably mounting the hanger bracket at the forward end of the earth moving device.

The frame 10 is supported by the forward and rear wheels 11 and 12 and by the side wheel 13 which is positioned at approximately the center of the frame. The plow beam 14 is carried by the frame with its forward end extending beyond the frame and provided with a clevis 15 to which the equalizer may be secured. The inner end portion 16 of the plow beam 14 is carried downwardly, as shown in Fig. 1, and is adjustably secured to the mold-board of the plow-blade 17. This plow-blade has its mold-board 18 curved, as shown in Fig. 2, so that it will conform to the contour of the earth moving device mounted adjacent it, thus permitting the earth to pass easily between the mold-board and moving device.

The earth moving device comprises the auger 19 which is of a suitable size and has its end portions formed into pivot pins 20 and 21, so that the auger may be rotatably mounted in the hanger bracket 22, which is secured to the plow beam 14 by a bolt 23 which passes through a slot 24 in the upper end of the hanger bracket, as shown in Fig. 4. By means of this construction, the hanger bracket may be vertically adjusted and thus the position of the auger may be regulated. The journal bracket 25 is secured to the mold-board and has its outer end portion 26 bent at right angles to its inner end portion, so that it will extend to one side of the mold-board and thus permit the pivot pin 21 to be rotatably mounted in its bearings 27. A sprocket wheel 28 is rigidly mounted upon the pivot pin 21 and is connected with a sprocket wheel 29 carried by the engine 30 by means of a sprocket chain 31, so that when the engine is in operation, rotary motion will be transmitted to the auger. The motor 30 shown is of the gasolene type, but it is obvious that any other type of motor could be used and that any other desired means could be used for transmitting rotary motion from the engine to the auger.

The operation of this device is as follows: When the plow is drawn across the field, the blade cuts into the ground and as the furrow is formed the earth which is dug up by the blade passes across the mold-board between the mold-board and the auger. This auger, while rotating, engages the earth and forces it across the mold-board, and it will thus be seen that a great deal of the strain is removed from the horses since the auger rotates at sufficient speed to feed the earth across the mold-board faster than the horses travel. If it is so desired, the auger may be positioned close enough to the mold-board to cut into the earth passing across the board and thus cut the earth into small clots, so that it can be more readily broken up by a harrow after the field has been plowed. The principal object of the invention is, however, to assist the earth in passing across the board to relieve the draft animals from unnecessary strain. When the plow-blade is adjusted upon the downturned end portion 16 of the plow beam to regulate the depth at which it will cut into the ground, it is of course, necessary that the auger should also be vertically adjusted, so that it will maintain the same relative position with the mold-board and therefore the adjustment for the hanger bracket 22 has been provided.

What is claimed is:

1. An agricultural implement comprising

a frame, a beam, a plow-blade adjustably carried by said beam, a journal bracket carried by said plow-blade, a hanger adjustably carried by said beam and provided with a bearing at its lower end, an auger rotatably mounted in the bearings of said journal bracket and said hanger bracket and extending in spaced relation to the outer face of the mold-board of said plow-blade, and means for rotating said auger.

2. An agricultural implement comprising carrying means, digging means adjustably connected with said carrying means, rotatary earth engaging means positioned adjacent said digging means, means for rotatably supporting one end of said earth engaging means rigidly secured to said digging means, means for rotatably supporting the opposite end of said earth engaging means adjustably connected with said carrying means, and means for rotating said earth engaging means.

3. An attachment of the character described comprising a rotatable earth-engaging member, a bearing bracket for rotatably supporting one end of said rotatable earth-engaging member and adapted for rigid engagement with a digging device, a second bearing bracket for rotatably supporting the opposite end of said rotatable earth-engaging member and adapted for adjustable engagement with a support with which said digging device is adjustably connected, and means for permitting rotary motion to be transmitted to said rotatable earth-engaging element.

4. In a plow, a supporting structure, a digging blade adjustably carried by said supporting structure, a bearing bracket rigidly connected with said digging blade, a rotatable earth engaging element extending along said digging element and having one end portion rotatably supported by said bearing bracket, and a bearing bracket adjustably connected with said supporting structure and engaging the opposite end portion of said earth engaging element to rotatably support the same.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL J. LYONS.

Witnesses:
F. M. HALLISTER,
W. L. SPRAGUE.